

# Overcoming The Top 10 Barriers to Health Behavior Change

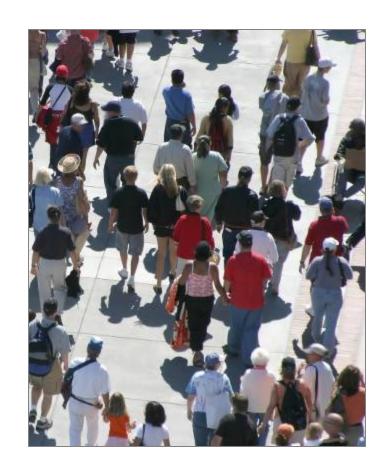
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#### **Health Behaviors**

- Majority of adults in the United States are overweight or obese
- 25% to 50% use tobacco products
- Two-thirds of adults in this country have a sedentary lifestyle
- Most adults know these health risks, so education alone is not the solution



### Ten Barriers to Change

- Psychological difficulties
- Stress management issues
- Limited knowledge about my health
- Lack of individual treatment-matching model
- Poor understanding of the behavior
- Outcome oriented goal setting strategies
- Low self-confidence for change
- Shifting beliefs about changing the behavior
- Lack of social support
- Relapse to unhealthy behavior

# Psychologic/Psychiatric Management Issues

- Presence of a mood disorder
  - Depression
  - Dysthymic disorder (low grade depression)
- Presence of an anxiety disorder
  - Generalized anxiety disorder
  - Panic disorder
- Substance abuse
- Psychotic disorder
  - Bipolar disorder
  - Schizophrenia

63% prevalence of emotional health risk factor – Mayo Clinic HRA database of participants (2007)

#### **Economic Burden of Depression**

Major depressive disorder: Lifetime: 16.2%

Past 12 months: **6.6%** 

- In 2000, cost of depression in the US: \$83.1 billion
- More days absent from work, less productivity
- Short-term disability: Depression 40 days

Physical disorders 29 days

Psychiatric conditions 32 days

Greenberg, et al., 2003, *J Clin Psychiatry*, 64:12; Steffick et al., 2006, *Dis Manage Health Outcomes*, 14, 1

#### **Mood and Adherence**

- Over age 64, with CAD, 50% stenosis
  - Aspirin twice per day
- Depressed
  - 45% adherence
- Non-depressed
  - 69% adherence

Carney, et al, Health Psych, 1995; 14:88-90

# Sexual Abuse Survivors and Psychiatric Hospitalizations After Obesity Surgery

- 152 patients, two years after surgery
  - 111 females
  - 41 males
  - 51.3 years old
- Roux-en-Y gastric bypass surgery

Clark, Hanna, Mai, Graszer, Krochta, McAlpine, Reading, Abu-Lebdeh, Jensen, & Sarr (2007) *Obesity Surgery*.

# Frequency of Report of Being the Victim of Abuse

Childhood sexual abuse: 27%

• Adult sexual trauma: 9%

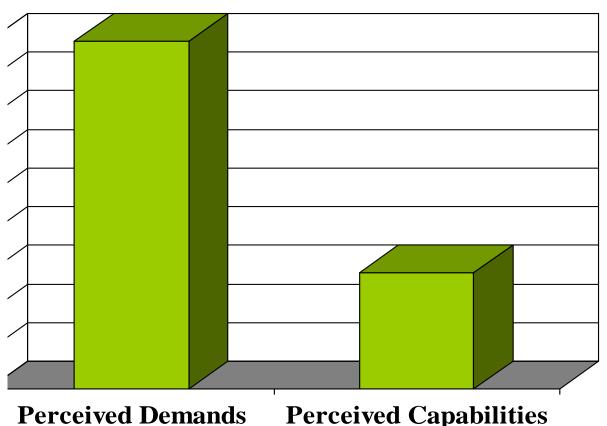
# Post-Operative Psychiatric Hospitalizations

- Denied being the victim of childhood sexual abuse:
   3% were hospitalized
- Reported being the victim of childhood sexual abuse:
   22% were hospitalized

**Conclusions:** We do not believe these patients should be excluded from obesity surgery, but perhaps increasing the psychologic/psychiatric surveillance and treatment of trauma survivors may be beneficial.

#### **Stress**

When perceived demands exceed perceived capabilities



**Perceived Capabilities** 

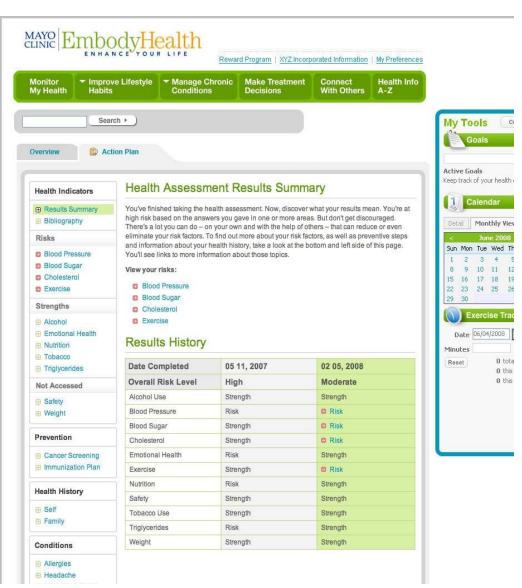
#### When I Am "Stressed Out"

- Emotional
  - Turn to food, smoking, etc., for comfort
- Cognitive
  - Not focused on health goals
  - Make a decision to skip exercise, meal planning, etc.
- Practical
  - Lack of planning
  - Lack of time

# The Importance of Personal Health Information

#### **Teachable moments**

- Hospitalization
- Disease diagnosis
- Abnormal test results
- Clinic visits
- HRA



#### **Patient Treatment Matching Models**

- Tobacco cessation
  - 45-year old male, 3-pack-per-day smoker
  - 19-year old male, college student, 15 cigarettes per week
- Physical activity
  - 45-year old, 50 pound overweight post-MI male
  - 25-year old in good health male
- Weight management
  - 45-year old, 400 pound, type 2 diabetic male
  - 27-year old, 30 pound overweight healthy male

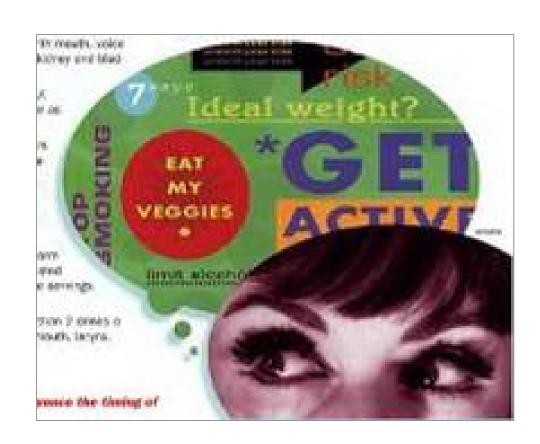
#### **Identify Personal High Risk Situations**

- Negative mood; sad, frustrated
- Positive mood; celebrating
- Social; when with friends
- Thoughts; "I must \_\_\_\_"
- Physical; cravings
- Habit; TV, driving, studying

#### **Goal Setting Strategies**

#### **SMART**

- Specific
- Measurable
- Attainable
- Realistic
- Trackable



### Reasonable Versus Ideal Weight

60 women, 40 yrs old, 218 lbs., BMI 36.3

- Dream weight
- Happy weight
- Acceptable weight
- Disappointed weight

Foster GD, Wadden TA, Vogt RA, & Brewer G, JCCP, 1997, 65:79-85

#### **Impact of Perceptions**

#### Current Weight 218 lbs., 5'5" Tall

	Pounds
Dream weight	135
Happy weight	150
Acceptable weight	163
Disappointed weight	180

In past, lowest weight maintained of one year; 144 lbs.

# After 24 Weeks, 41 Pounds Weight Loss

	Percent
Dream weight	0
Happy weight	7
Acceptable weight	26
Disappointed weight	37
Not even disappointed	30

# Counseling Relationship: Motivational

- Quality of relationship critical to effective change
- Collaboration rather than confrontation
- Beyond simple information delivery, training in health behavior change, motivational interviewing, self-management education



### **Confrontational Interviewing**

- For how many years have you been overeating?
- Your blood sugar readings indicate that you are not following your diabetic diet.
- You know you should be exercising, don't you?

### **Motivational Interviewing**

- What concerns you about your current eating habits?
- Tell me about your current tobacco usage.
- What are some of your barriers to being physically active?

### **Building Motivation for Change**

- Importance
- Confidence

William R. Miller, PhD and Stephen Rollnick, PhD *Motivational Interviewing: Preparing People for Change*, 2<sup>nd</sup> Edition. 2002, The Guilford Press, New York

#### Low importance Low confidence

- Change is not important
- Believe they cannot succeed

#### High importance Low confidence

 Willing to change, but lack confidence

#### Low importance High confidence

- Not persuaded to change
- Believe they could if they decided to

# **High importance High confidence**

Ready to change



How confident am I that I can:

- Follow a healthy diet
- Adopt a physically active lifestyle
- Manage my weight

#### **Predictors of Exercise Relapse**

#### **Mayo Study on Exercise**

- 52 undergraduates, active in September
- 7 relapsed, 45 maintained
- Decisional balance
- Lower self-efficacy

Sullum, Clark, & King. Predictors of exercise relapse in a college population. *Journal of American College Health* 2000; 48:175-180.

### Measuring Changes in Self-Efficacy

# Indicators of ability to make/maintain behavior change

- Mayo Clinic EmbodyHealth Coaching
  - 52% increased confidence in ability to manage their weight
  - 47% increased their confidence in ability to maintain healthy eating habits
  - 63% increased confidence in ability to manage stress
- Mayo Clinic EmbodyHealth newsletter
  - 78% of surveyed readers are more confident in their ability to take care of their health

# Nicotine Dependence Counseling for Lung Cancer Patients

201 lung cancer patients

Stage I	52%
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Stage II 12%

Stage III 29%

Stage IV 7%

201 date of treatment matched controls

Cox, Patten, Ebbert, Drews, Croghan, & Clark; Tobacco use outcomes among lung cancer patients treated for nicotine dependence. *Journal of Clinical Oncology:* 2002, 20:3461-3469

# 6-Month Self-Report 7-Day Point Prevalence Tobacco Abstinence

- 22% of lung cancer patients
- 14% of controls



### **Time Since Diagnosis**

- 27% abstinence if within3 months
- 0% if between 3 and 6 months
- 7% abstinence if greater than6 months



#### **Motivation and 6-Month Abstinence**

- 7.7% not thinking about stopping
- 22.2% beginning to think about stopping
- 28.1% I am ready to stop smoking

### One Perspective on Physical Activity

- I will experience greater weight loss
- My mood will improve
- My health will improve
- How fun, going for a workout with my friends
- My sleep will improve
- Physical activity is both structured exercise and lifestyle activities

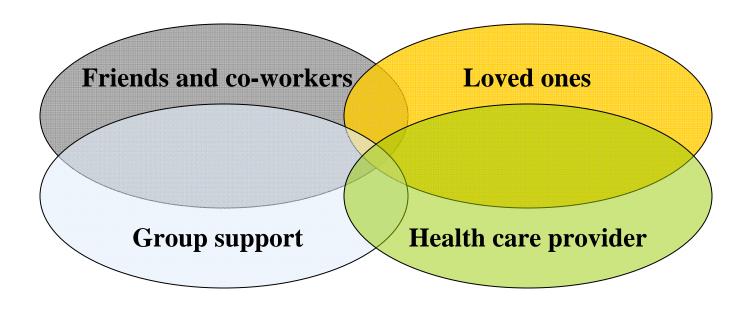
# Different Perceived Effects of Exercise

- I will experience intense physical pain!
- I will totally embarrass myself.
- I will be very uncomfortable sweating, and sweating is a horrible feeling.
- I will have a huge pile of smelly laundry to do.
- I hated high school gym class, and I will hate this even more.
- Exercising means I will fall behind on my work and chores at home.

### **Decisional Balance for Weight Loss**

Pros	Cons
<ul><li>Better energy</li><li>Improved body image</li><li>Better health</li></ul>	<ul> <li>Diets are boring</li> <li>Exercise takes time</li> <li>Could not have lunch with co-workers</li> </ul>

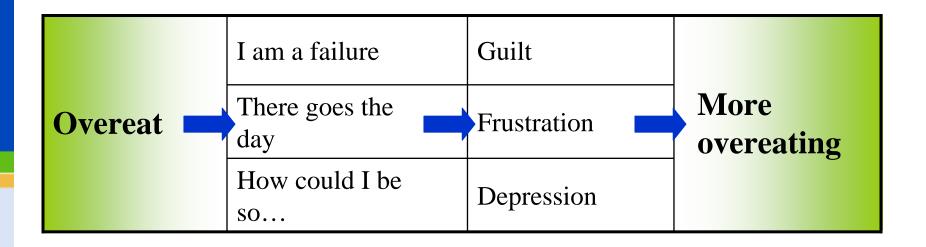
### Impact of Social Support



## **Relapse Prevention**

- Abstinence
  - Smoking
  - Substance usage
- Moderation
  - Eating
  - Exercise

### **Overcoming Mistakes**



#### **Breaking the Cycle**

- Positive self-talk
- Seek support
- Plan positive activities
- Challenge all-ornothing thinking
- Exercise



# Solutions to Top 10 Barriers to Change

- Address mental health needs: Screening, EAP, or referral to appropriate services
- Provide strategies for stress management
- Assess and provide health risk information take advantage of the teachable moment
- Provide guidelines for treatment-matching
- Complete behavioral records: Urges, environment, mood, intake, activity level, cigarettes, etc.



- Set reasonable, specific, task oriented goals
- Enhance confidence for change
- Ongoing strategies to maintain motivational level
- Create opportunities for social support
- Incorporate relapse prevention strategies

#### **Questions?**

For more information on Mayo Clinic population health management programs:

www.MayoClinicHealthSolutions.com